PCIA *Personal*
Communications
Industry
Association

June 19, 1997

William F. Caton
Acting Secretary
Federal Communications Commission
Room 200, 1919 M Street, NW
Washington, D.C. 20554

      Re: Ex Parte Notification
            Docket No. 94-102

Dear Mr. Caton:

       The purpose of this letter is to notify the Commission, pursuant to Section 1.1206(a)(2) of the Commission's Rules, that on June 18, 1997, the following parties listed below met with John Cimko, Dan Grosh, Ron Netro, Nancy Boocker, Brian Lowinge, Amy Vande Kerckhove and Won Kim of the Federal Communication Commission's Wireless Bureau.

       The parties included: Mary Madigan of the Personal Communications Industry Association (henceforth referenced as PCIA); Craig Krueger of PCIA; Barbara Baffer of Ericsson; Ben Almond of BellSouth; Gina Harrison of SBC; Brye Bonner of Motorola; William J. Todd of PrimeCo Personal Communications; Linda Lancaster of BellSouth; and Gerald Christensen of BellSouth.
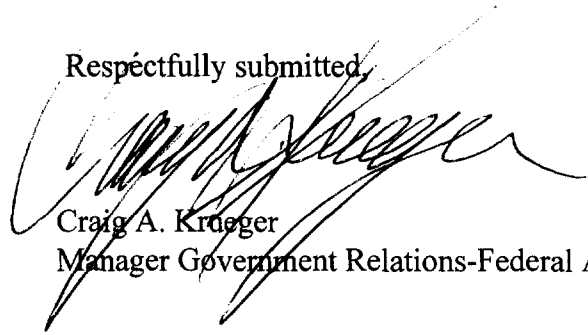
       The parties discussed issues relating to the E-911 proceeding, Docket No. 94-102. The enclosed attachments were distributed to all parties attending this ex parte meeting. These attachments provide a summary of the issues and questions discussed at this ex parte meeting. Additional issues to be addressed by the coalition include::

1)   In the all calls scenario, can you perform a subsequent validation once a call has been passed to the PSAP?

2)   In a scenario where the wireless carrier is attempting to validate calls (as opposed to sending all calls and by passing the validation process), is it possible to disregard the result of a validation attempt for E911 calls? What would you gain by doing this as opposed to just doing all calls?

The E-911 wireless coalition stated that it intends to submit answers for each wireless technology. Should you have any questions regarding the matter, please call me.

Respectfully submitted,

Craig A. Krueger
Manager Government Relations-Federal Affairs

Questions on E911 Implementation

Prepared by
Policy Division
Wireless Telecommunications Bureau

June 13, 1997

Modified by E911 Wireless Coalition
June 16, 1997
(Additions are indicated as bold text, deletions are also indicated)

In the E911 Report and Order (FCC 96-264) (hereinafter cited as "Order"), the Commission established a schedule for basic and enhanced 911 access by wireless carriers. Some of the petitions seeking reconsideration, and ex parte presentations regarding the Order, raise issues touching on the technical feasibility of the schedule and other aspects of the Order. To help our understanding and evaluation of these issues, we are seeking answers to several questions. In answering these questions, please feel free to provide additional information helpful to understanding the technical aspects of wireless E911. In addition, please feel free to define any terms developed in your responses.

1. What are the relevant technologies, services, and switch vendors, *e.g.*:

Technology	Service	Vendor
AMPS/TDMA	Analog, digital cellular, **PCS**	Ericsson, Lucent, Motorola, Nokia, **Nortel, Hughes**
CDMA	Digital cellular, PCS	Lucent, Motorola, Nortel, Qualcomm
GSM	~~European~~ digital standard for PCS	Ericsson, Hughes, Motorola, Nortel
iDEN	ESMR	Motorola, **Nortel**
Other	(Specify)	(Specify)

2.   For each of these technologies, what codes are programmed into the handset and transmitted to the cell site or switch -- **[We will assume that in this case the codes listed are those that enable a switch to recognize a handset.]**

By **handset** manufacturer

By ~~dealer~~ **retail center**

By carrier

Other

3.   What is the source of these codes --

North American Numbering Plan

Manufacturer's serial number

~~Dealer~~ **Retail Center** code

Other?

4.   Which of these codes **or combination of codes** identifies the handset **and subscriber?**

5.   Which of these codes **or combination of codes** can be used for callback by a PSAP --

Directly, as in the case of a NANP code

Indirectly through database lookup?

[Our answer is based on the assumption that the PSAP has upgraded its equipment to receive the information and that the telco can transmit the information.]

~~7.~~6.   Describe the validation process for each technology. Is there more than one type of validation, *e.g.*, for service initialization, credit worthiness, *etc.*?

~~6.~~7.   Can the wireless switch ~~route~~ **pass** calls to PSAPs based on whether one or more of these codes is initiated in the handset? Which ones? Does this answer differ because, e.g. of the model of the switch, software, or other factors?

8.   It has been suggested to us that wireless switch technologies generally allow only two choices in the handling of 911 calls -- either all calls are transmitted or only calls that are ~~currently service initialized~~ **successfully validated** can be transmitted. This is

inconsistent with the understanding of the Commission in the Order which required that code identified calls be transmitted.

- Do you consider it to be impossible, at the present time, for wireless switches to route all 911 calls from handsets that are code-identified to PSAPs? For which technologies?

- What are the technical constraints and factors that make it currently impossible to route some or all code-identified 911 calls to the PSAP? **[We are not addressing validated calls with this question.]**

- Is it possible to modify switch software to route code-identified calls? ·

9. It has been suggested that if only service initialized calls are routed to PSAPs, the calls must be validated for some technologies, *e.g.*, AMPS and CDMA.

- Is this correct?

- Where calls must be validated, what does this mean? For example, if a caller is a roamer without a roaming agreement, would the validation process delay the call? Would the caller be required to provide a credit card number or other information?

- Can some or all switches be set to validate, but ignore the result in the case of 911 calls (in order to avoid delay)?

10. If a switch is set to transmit all 911 calls to PSAPs, can it also transmit --

7 digit ANI

10 digit ANI

10 digit ANI and 10 digit pseudo ANI

11. Can the switch selectively route calls differently to different PSAPs, e.g., all calls to some PSAPs and only service initialized calls to others? Does this capability vary depending on the model of switch? The software?

12. Do you believe more time will be needed to successfully implement --

Basic 911 requirements (currently scheduled for October 1, 1997)

E911 Phase I (currently scheduled for April 1, 1997)

If so, how much time?

13. In the Order, the Commission recognized that when non-code identified calls are transmitted to a PSAP, the PSAP may not receive ANI information allowing call back for such calls. It has recently been suggested that if a carrier transmit all 911 calls, including those not code identified, the carrier may be unable to transmit ANI for other calls. IN other word, transmission of non-code identified calls might actually impair PSAP callback or other capabilities for service-initialized calls from subscribers or roamers.

- Are there any cases where this would occur?

- If so, under what circumstances, e.g., which switches or vintages of software?

- What causes this effect?

- What remedies would be required to correct this problem and provide callback capability for all service-initialized callers, including roamers without automatic roaming?

Calls from Wireless Handsets
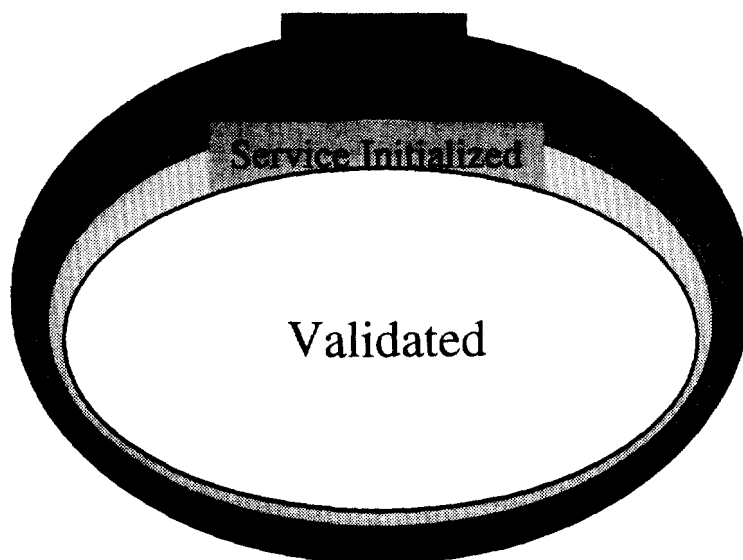
Category	Description	Inclusive Examples
All Calls	Passes minimum technical validation	GSM phone - no SIM Phone with all zeros MIN
Code Identified	Meets FCC definition	New GSM phone – SIM but not activated Service disconnected set
Service Initialized	Active subscriber on some carrier's system	Manual roamer
Validated	Passes home subscriber or roamer partner validation – active and in good standing	Calls within home market or roaming partner market